Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (Currently amended) A method for inhibiting apoptosis in a cell, the method comprising:

determining an effective amount of an apoptosis inhibitor effective to inhibit apoptosis in the cell;

wherein an apoptosis inhibitor is selected from the group consisting of colostrinin, a constituent peptide of colostrinin and combinations thereof;

contacting the cell with [[an]] the effective amount of an apoptosis inhibitor ~~selected from the group consisting of colostrinin, a constituent peptide of colostrinin and combinations thereof~~;

wherein the constituent peptide of colostrinin is selected from the group consisting of MQPPPLP (SEQ ID NO:1), LQTPQPLLQVMMEPQGD (SEQ ID NO:2), DQPPDVEKPDLQPFQVQS (SEQ ID NO:3), LFFFLPVVNVLP (SEQ ID NO:4), DLEMPVLPVEPFPFV (SEQ ID NO:5), MPQNFYKLPQM (SEQ ID NO:6), VLEMKFPPPPQETVT (SEQ ID NO:7), and LKPFPKLKVEVFPFP (SEQ ID NO: 8);

and wherein the apoptosis inhibitor inhibits apoptosis in the cell.

2. (Original) The method of claim 1 wherein the cell is present in a cell culture, a tissue, an organ, or an organism.

3. (Original) The method of claim 1 wherein the cell is a mammalian cell.

4. (Original) The method of claim 3 wherein the cell is a human cell.

5. (Previously Presented) The method of claim 1 wherein the inhibitor is colostrinin.

6. (Previously Presented) The method of claim 1 wherein the inhibitor is a constituent peptide of colostrinin selected from the group consisting of MQPPPLP (SEQ ID NO:1), LQTPQPLLQVMMEPQGD (SEQ ID NO:2), DQPPDVEKPDLQPFQVQS (SEQ ID NO:3), LFFFLPVVNVLP (SEQ ID NO:4), DLEMPVLPVEPFPFV (SEQ ID NO:5), MPQNFYKLPQM (SEQ ID NO:6), VLEMKFPPPPQETVT (SEQ ID NO:7), LKPFPKLKVEVFPFP (SEQ ID NO:8), and combinations thereof.

7. (Canceled)

8. (Previously Presented) The method of claim 1 wherein the apoptosis is due to DNA damage.

9-11. (Canceled)

12. (Currently amended) A method for protecting against DNA damage in a cell, the method comprising :

determining an effective amount of a compound effective to protect against DNA damage in the cell, wherein the compound is selected from the group consisting of colostrinin, a constituent peptide of colostrinin and combinations thereof;

contacting the cell with an effective amount of the [[a]] compound ~~selected from the group consisting of colostrinin, a constituent peptide of colostrinin, and combinations thereof;~~

wherein the constituent peptide of colostrinin is selected from the group consisting of MQPPPLP (SEQ ID NO:1), LQTPQPLLQVMMEPQGD (SEQ ID NO:2), DQPPDVEKPDLQPFQVQS (SEQ ID NO:3), LFFFLPVVNVLP (SEQ ID NO:4), DLEMPVLPVEPFPFV (SEQ ID NO:5), MPQNFYKLPQM (SEQ ID NO:6), VLEMKFPPPPQETVT (SEQ ID NO:7), and LKPFPKLKVEVFPFP (SEQ ID NO: 8);

and wherein the compound protects the cell against DNA damage.

13. (Original) The method of claim 12 wherein the cell is present in a cell culture, a tissue, an organ, or an organism.

14. (Original) The method of claim 12 wherein the cell is a mammalian cell.

15. (Original) The method of claim 14 wherein the cell is a human cell.

16-24. (Canceled)

25-26. (Cancel)

27. (Currently amended) A method for reducing the toxic effect of β-amyloid on a cell, the method comprising:

determining an effective amount of a compound effective to reduce the toxic effect of β-amyloid on the cell, wherein the compound is selected from the group consisting of colostrinin, a constituent peptide of colostrinin and combinations thereof;

contacting the cell with an effective amount of [[a]] the compound ~~selected from the group of colostrinin, a constituent peptide thereof, and combinations thereof~~;

wherein the constituent peptide of colostrinin is selected from the group consisting of SEQ ID NO:~~1-34~~ 1-8; and

wherein the compound reduces the toxic effect of β-amyloid on the cell.

28. (Currently amended) A method for reducing the toxic effect of retinoic acid on a cell, the method comprising:

determining an effective amount of a compound effective to reduce the toxic effect of retinoic acid on the cell, wherein the compound is selected from the group consisting of colostrinin, a constituent peptide of colostrinin and combinations thereof;

contacting the cell with an effective amount of [[a]] the compound;

wherein the constituent peptide of colostrinin is selected from the group consisting of SEQ ID NO:~~1-34~~ 1-8; and

wherein the compound reduces the toxic effect of retinoic acid on the cell.

29-32. (Cancel)

33. (New) The method of claim 27 wherein the cell is present in a cell culture, a tissue, an organ, or an organism.

34. (New) The method of claim 27 wherein the cell is a mammalian cell.

35. (New) The method of claim 34 wherein the cell is a human cell.

36. (New) The method of claim 28 wherein the cell is present in a cell culture, a tissue, an organ, or an organism.

37. (New) The method of claim 28 wherein the cell is a mammalian cell.

38. (New) The method of claim 37 wherein the cell is a human cell.